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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/400,154	09/21/1999	HIDEO TAKIGUCHI	1232-4568	3080

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EXAMINER
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MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/400,154	<b>Applicant(s)</b> TAKIGUCHI ET AL.	
	<b>Examiner</b> Justin P Misleh	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 21 July 2004 have been fully considered but they are not persuasive.
2. In response to the rejections under 35 U.S.C. §102(b), the Applicant argues, “In Fukasaka, the disclosed operating members do not correspond to the computer applications on a one by one basis, although various operating and applications are listed. In other words, Fukasaka does not disclose a specific software program corresponding to a specific operation mode of the image input device, which is selected from a plurality of software programs as recited in independent Claims 1, 21, 23, and 25.”

The Examiner disagrees with the Applicant's argument. Granted that Fukasaka discloses that a predetermined application in a computer is automatically started when a shutter button of a camera is turned on; however, Fukasaka makes it clear that the various operating members, when operated, each start a different predetermined application respectively and that the various operating members, when operated, do not all start the same predetermined application that was started when the shutter button was operated. For instance, turning to column 6 (lines 33 – 35), Fukasaka states, “a hard disk 24 for storing an operating system, application programs, data, and so on.” Furthermore, turning to column 10 (lines 16 – 19), Fukasaka states, “it is possible to add a function for initiating an application by operating one of these buttons and switches.” Lastly, turning to column 10 (lines 53 – 56), Fukasaka states, “when a sound input apparatus is

connected to the computers 201 to 204, an application for processing sound may be executed in response to a predetermined operations of the sound input apparatus.”

From the above examples, Fukasaka is clear in showing that the predetermined application that is started in response to the operation of the shutter button is not the same as the predetermined applications that are stated in response to other buttons and switches, respectively. First, Fukasaka discloses multiple applications stored in the hard disk. Second Fukasaka discloses that AN application is initiated and not THE application (i.e. THE predetermined application) when other buttons and switches are respectively operated. Third and final, Fukasaka even discloses a predetermined application for processing sound, which is completely different than the predetermined application for the shutter button. As such, the invention as recited in independent Claims 1, 21, 23, and 25 are anticipated by the prior art disclosure of Fukasaka, and accordingly, dependent Claims 2, 4, 9, and 10 are likewise anticipated by the prior art disclosure of Fukasaka for at least the same reasons as independent Claim 1.

3. In response to the rejections under 35 U.S.C. §103(a), the Applicant again argues, “In Fukasaka, the disclosed operating members do not correspond to the computer applications on a one by one basis, although various operating and applications are listed. In other words, Fukasaka does not teach or suggest a single software program having a plurality of modes each of which respectively correspond to a specific operation mode of the image input device as recited in independent Claims 11, 22, 24, and 26.”

The Examiner stated above that Fukasaka discloses a plurality of applications each corresponding to each of the plurality of operating modes and also acknowledged in the Non-

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Final Office action (19 April 2004) that, “Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.”

However, it is well known in the art to provide a single software program that initiates a plurality of modes corresponding a plurality of functions and accordingly, as made clear in the Non-Final Office Action, it would have been obvious to one with ordinary skill in the art to incorporate that particular feature in Fukasaka as a means to increase the efficiency of the computer system thereby reducing wasted user waiting times. As such, the invention as recited in independent Claims 11, 22, 24, and 26 are unpatentable over the prior art teaching of Fukasaka, and accordingly, dependent Claims 3, 5, 6 – 8, 12 – 20 are likewise unpatentable over the prior art teaching of Fukasaka for at least the same reasons as independent Claim 1.

4. The Applicant’s amendments to the specification and drawings overcome all previous objections made in the Non-Final Office Action with exception of the objection to the title.

### *Specification*

5. The title of the invention, as amended, is still not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1, 2, 4, 9, 10, 21, 23, and 25** are rejected under 35 U.S.C. 102(b) as being anticipated by Fukasaka et al.

Examiner's Interpretation

Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in column 6 (line 18) – column 11 (line 5), an image input system including an image input device (101 – 104), having a plurality of operation modes (see column 10, lines 10 – 19), and a computer (201 – 204), having a plurality of software programs (application programs; also see column 10, lines 10 – 19) corresponding to the plurality of operation modes. Fukasaka et al. disclose wherein the image input device (101 – 104) is connected to a computer (201 – 204) via either an expansion board (23) within the computer (201), as shown in figure 1, a signal multiplexing/separating unit (14/25) within the image input device (102)/computer (202), as shown in figure 2, a data communication interface (26) within the computer (203), as shown in figure 3, or a high-speed communication interface (16/29) housed within both the image input device (104) and the computer (204), such as USB, as shown in figure 4.

Furthermore, Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19),

in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

In summary, Fukasaka et al. disclose, as stated in column 10 (line 45) – column 11 (line 4), that the present invention can be applied to any data input apparatus, in addition to an image sensing apparatus, having any trigger means, such as a switch button. In such cases, the data input apparatus generates an application execution request signal in response to an operation of the trigger means and transmits the signal to the computer; in turn, the computer executes a predetermined application that is initiated in response to the application execution request.

8. For **Claim 1**, Fukasaka disclose an image input system (figures 1 – 4) connectable to an image input device (101 – 104) having a plurality of operation modes (see column 10, lines 10 – 19, and lines 50 – 55), and includes a computer (201 – 204) having a plurality of software programs (application programs) each corresponding to each of the plurality of operation modes (“adding a function for initiating an application” program, as stated in column 10, lines 19 and 20), wherein at least one of the occasions when said image input device (101 – 104) is connected to said computer (201 – 204; also see explanation below), when a power supply of said image input device (101 – 104) is turned on after said image input device is connected to said computer

(201 – 204; also see explanation below), or when said image input device (101 – 104) is switched to another operation mode while said image input device (101 – 104) is connected to said computer (201 – 204; also see explanation below), the software program corresponding to the operation mode of said image input device is selected from the plurality of software programs and is automatically started.

First, in Fukasaka et al., a situation is disclosed pertaining to the image input device always connected to the computer. Second, the application program can only be automatically initiated when the image input device is connected to the computer. Again, the application program can only be automatically initiated when the image input device is connected to the computer. Furthermore, the triggering means may be a power switch, as indicated by Fukasaka in column 10 (line 11). Fukasaka et al. clearly disclose a plurality of operation modes and the initiation of a new application program upon the actuating of an operation mode in the image sensing device, as stated in column 10 (lines 10 – 19).

9. As for **Claim 2**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), that it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device (101 – 104) has a plurality of operation modes.



Furthermore Fukasaka et al. also disclose, as stated in column 10 (lines 20 – 37), a situation, corresponding to an image-sensing mode, wherein the image input device (101 – 104) is constantly transferring a moving image to the computer via the expansion board (23), shown in figure 1, for display on the display (30), and at the same time and while continuing to display moving images, a button or a switch (from the list identified above) triggers the execution of an application program, via the expansion slot (22), also shown in figure 1, to capture a still image. Moving image signals are output from the image input device (101 – 104) until the button or a switch (from the list identified above) is pressed again.

There are two things to note in regards to the claim language. First, the claim language requires a least one of several alternative choices of a list and thus, to meet the requirements of the claim, only one choice within the list needs to be present within Fukasaka et al. Furthermore, the claim language of Claim 2 does not define each of the operation modes rather it simply lists the operation modes. However, the operation modes, listed in Claim 2, are notoriously well known in the art and will be interpreted by the Examiner as such. Thus, Fukasaka et al. disclose an image-sensing mode.

10. As for **Claim 4**, the claim language requires defines the image-sensing mode, in that image sensing software is automatically started on said computer (201 – 204), and displays a preview image and senses an image on said computer (201 – 204). Fukasaka et al. states, in column 6 (lines 46 – 49), that image signals are constantly transferred to the computer (201 – 204) from the image input device (101 – 104) where they are displayed on the display (23) until the shutter button (11) is depressed on the image input device (101 - 104) thereby initiating an application program to transfer a still image from the image input device (101 – 104) to the

computer (201 – 204), also for display on the display (23). Thus, since Fukasaka et al. is previewing a moving image on the display (23) prior to capturing a still image for transfer to the computer (201 – 204), Fukasaka et al. disclose an image-sensing mode.

11. As for **Claim 9**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), that in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations.

Furthermore Fukasaka et al. also disclose, as stated in column 10 (lines 20 – 37), a situation wherein the image input device (101 – 104) is constantly transferring a moving image to the computer via the expansion board (23), shown in figure 1, for display on the display (30), and at the same time and while continuing to display moving images, another button or switch (from the list identified above) triggers the execution of an application program via the expansion slot (22), also shown in figure 1, which displays simultaneously, on the display (30), with the moving image a dialog between the operator and the application program executed.

Thus, in regards to the “given software” requirement of Claim 9, Claim 1, at least requires a plurality of software programs wherein a corresponding software program is automatically started. However, Claim 9 is broad in that “given software” does not specify solely the software program in Claim 1. For example, “given software”, while applicable to the software program of Claim 1, it is also applicable to an operating system of the computer or to the software required to operate the computer. For the purposes of this rejection, “given”

software” is the software required to display the moving image, provided via the expansion board (23), as shown in figure 1, and the “predetermined process” is the dialog simultaneously displayed, provided via the expansion slot (22).

Furthermore, in regards to “one of a process”, to meet the requirements of Claim 9, only one process of the list of alternative processes meets the Claim. Thus, Fukasaka et al. discloses continuing to run the software to displaying the moving image and initiates another application program upon a trigger transmitted from the image input device, via the expansion slot (22), wherein the moving image and the dialog for the application program are displayed simultaneously on the display (30).

Therefore, Fukasaka et al. disclose wherein when the operation mode of said image input device is switched to another operation mode while said image input device is connected to said computer and given software is running (as discussed above), a process (as discussed above) for continuing to run the software (as discussed above), after that, software corresponding to the new operation mode is automatically started.

12. As for **Claim 10**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), that in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations.

In regards to the claim language, the Claim requires wherein the operation mode is switched by a fixed switch or a dial switch on said image input device (101 – 104), or an

operation/setup menu in an LCD panel. To meet the requirements of the claim, Fukasaka et al. needs to disclose only one of the above listing, because the above listing includes “or”, thereby implying alternative choices and not mandatory choices. Thus, Fukasaka et al. disclose, at least, a fixed switch (11) on the image input device (101 – 104).

13. For **Claims 21, 23, and 25**, Fukasaka disclose a method of controlling an image input system (figures 1 – 4), a storage medium (hard disk 24, CD-ROM, or other media) that stores a control program for controlling an image input system (figure 1 – 4), and a program product (application program) that comprises a control program for controlling an image input system (figures 1- 4), that are connectable to an image input device (101 – 104) having a plurality of operation modes (see column 10, lines 10 – 19, and lines 50 – 55), and includes a computer (201 – 204) having a plurality of software programs (application programs) each corresponding to each of the plurality of operation modes (“adding a function for initiating an application” program, as stated in column 10, lines 19 and 20), said method/control program comprising: the step/code of the step of selecting and automatically starting the software program corresponding to the operation mode of said image input device (101 – 104), when said image input device (101 – 104) is connected to said computer (see explanation below), when a power supply of said image input device (101 – 104) is turned on after said image input device (101 – 104) is connected to said computer (201 – 204; also see explanation below), or when said image input device is switched to another operation mode while said image input device is connected to said computer (201 – 204; also see explanation below).

First, in Fukasaka et al., a situation is disclosed pertaining to the image input device always connected to the computer. Second, the application program can only be automatically

initiated when the image input device is connected to the computer. Again, the application program can only be automatically initiated when the image input device is connected to the computer. Furthermore, the triggering means may be a power switch, as indicated by Fukasaka in column 10 (line 11). Fukasaka et al. clearly disclose a plurality of operation modes and the initiation of a new application program upon the actuating of an operation mode in the image sensing device, as stated in column 10 (lines 10 – 19).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 7, 8, 11, 12, 14, 17 – 20, 22, 24, and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al.

**Examiner's Interpretation**

Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in column 6 (line 18) – column 11 (line 5), an image input system including an image input device (101 – 104), having a plurality of operation modes (see column 10, lines 10 – 19), and a computer (201 – 204), having a plurality of software programs (application programs; also see column 10, lines 10 – 19) corresponding to the plurality of operation modes. Fukasaka et al. disclose wherein the image input device (101 – 104) is connected to a computer (201 – 204) via either an expansion board (23) within the computer (201), as shown in figure 1, a signal multiplexing/separating unit

(14/25) within the image input device (102)/computer (202), as shown in figure 2, a data communication interface (26) within the computer (203), as shown in figure 3, or a high-speed communication interface (16/29) housed within both the image input device (104) and the computer (204), such as USB, as shown in figure 4.

Furthermore, Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

In summary, Fukasaka et al. disclose, as stated in column 10 (line 45) – column 11 (line 4), that the present invention can be applied to any data input apparatus, in addition to an image

sensing apparatus, having any trigger means, such as a switch button. In such cases, the data input apparatus generates an application execution request signal in response to an operation of the trigger means and transmits the signal to the computer; in turn, the computer executes a predetermined application that is initiated in response to the application execution request.

16. For **Claim 11**, Fukasaka disclose an image input system (figures 1 – 4) connectable to an image input device (101 – 104) having a plurality of operation modes (see column 10, lines 10 – 19, and lines 50 – 55), and includes a computer (201 – 204) having a plurality of software programs (application programs) each corresponding to each of the plurality of operation modes (“adding a function for initiating an application” program, as stated in column 10, lines 19 and 20), wherein at least one of the occasions when said image input device (101 – 104) is connected to said computer (201 – 204; also see below for explanation), when a power supply of said image input device (101 – 104) is turned on after said image input device is connected to said computer (201 – 204; also see below for explanation), or when said image input device (101 – 104) is switched to another operation mode while said image input device (101 – 104) is connected to said computer (201 – 204; also see below for explanation), the software program corresponding to the operation mode of said image input device is automatically started.

First, in Fukasaka et al., a situation is disclosed pertaining to the image input device always connected to the computer. Second, the application program can only be automatically initiated when the image input device is connected to the computer. Again, the application program can only be automatically initiated when the image input device is connected to the computer. Furthermore, the triggering means may be a power switch, as indicated by Fukasaka in column 10 (line 11). Fukasaka et al. clearly disclose a plurality of operation modes and the

initiation of a new application program upon the actuating of an operation mode in the image sensing device, as stated in column 10 (lines 10 – 19).

Fukasaka et al. clearly disclose initiating a plurality of application programs corresponding to a plurality of operation modes; albeit, Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.

However, Official Notice (MPEP § 2144.03) is taken the both the concepts and advantages of providing a single software program that initiates a plurality of modes corresponding to a plurality of functions are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a single software program that initiates a plurality of modes corresponding to a plurality of functions into the image input system of Fukasaka et al. as a means to increase the efficiency of the image input system thereby reducing wasted user waiting times.

17. As for **Claim 12**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), that it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device (101 – 104) has a plurality of operation modes.



Furthermore Fukasaka et al. also disclose, as stated in column 10 (lines 20 – 37), a situation, corresponding to an image-sensing mode, wherein the image input device (101 – 104) is constantly transferring a moving image to the computer via the expansion board (23), shown in figure 1, for display on the display (30), and at the same time and while continuing to display moving images, a button or a switch (from the list identified above) triggers the execution of an application program, via the expansion slot (22), also shown in figure 1, to capture a still image. Moving image signals are output from the image input device (101 – 104) until the button or a switch (from the list identified above) is pressed again.

There are two things to note in regards to the claim language. First, the claim language requires a least one of several alternative choices of a list and thus, to meet the requirements of the claim, only one choice within the list needs to be present within Fukasaka et al. Furthermore, the claim language of Claim 2 does not define each of the operation modes rather it simply lists the operation modes. However, the operation modes, listed in Claim 2, are notoriously well known in the art and will be interpreted by the Examiner as such. Thus, Fukasaka et al. disclose an image-sensing mode.

18. As for **Claim 14**, the claim language requires defines the image-sensing mode, in that image sensing software is automatically started on said computer (201 – 204), and displays a preview image and senses an image on said computer (201 – 204). Fukasaka et al. states, in column 6 (lines 46 – 49), that image signals are constantly transferred to the computer (201 – 204) from the image input device (101 – 104) where they are displayed on the display (23) until the shutter button (11) is depressed on the image input device (101 - 104) thereby initiating an application program to transfer a still image from the image input device (101 – 104) to the

computer (201 – 204), also for display on the display (23). Thus, since Fukasaka et al. is previewing a moving image on the display (23) prior to capturing a still image for transfer to the computer (201 – 204), Fukasaka et al. disclose an image-sensing mode.

19. As for **Claims 7 and 17**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), that in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations.

Furthermore Fukasaka et al. also disclose, as stated in column 10 (lines 20 – 37), a situation wherein the image input device (101 – 104) is constantly transferring a moving image to the computer via the expansion board (23), shown in figure 1, for display on the display (30), and at the same time and while continuing to display moving images, another button or switch (from the list identified above) triggers the execution of an application program via the expansion slot (22), the display (30), simultaneously displays, along with the moving image, a dialog between the operator and the application program executed.

Thus, in regards to the “given software” requirement of Claim 7, Claim 1, at least requires a plurality of software programs wherein a corresponding software program is automatically started. However, Claim 7 is broad in that “given software” does not specify solely the software program in Claim 1. For example, “given software”, while applicable to the software program of Claim 1, it is also applicable to an operating system of the computer or to the software required to operate the computer. For the purposes of this rejection, “given”

software” is the software required to display the moving image, provided via the expansion board (23), as shown in figure 1, and the “predetermined process” is the dialog simultaneously displayed.

As just described, Fukasaka et al. only disclose that various buttons or switches may trigger an application program, however, Fukasaka et al. do not disclose the details regarding the trigger and, more specifically, do not disclose wherein when the power supply of said image input device is turned off while said image input device is connected to said computer and given software is running, the software executes a predetermined process.

At the time the invention was made, one with ordinary skill in the art would have been motivated to include wherein when the power supply switch is turned off when the image input device (101 – 104) is connected (always connected) to said computer (201 – 204) and given software (moving image preview on the display) is running, the software executes a predetermined process, such as displaying a dialog (see column 10, lines 20 – 37) to inform the user that the camera is turned off, as a means for providing the user ease and efficiency when debugging the system in the case of malfunction, such as a turned off image input unit. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include wherein when the power supply switch is turned off when the image input device is connected to said computer and given software is running, the software executes a predetermined process, such as displaying a dialog to inform the user that the image input device is turned off.

20. As for **Claims 8 and 18**, as shown in regards to Claims 7 and 17, respectively, it would have been obvious to one with ordinary skill in the art to include wherein when the power supply

switch is turned off when the image input device is connected to said computer and given software is running, the software executes a predetermined process, such as displaying a dialog to inform the user that the image input device is turned off.

Thus, according to the obviousness, the predetermined process is displaying a dialog to inform the user that the image input device is turned. According to Fukasaka et al., the dialog is displayed simultaneously with the moving image. As stated above, the Examiner interpreted the displaying of a moving image, as the given software. Thus, Fukasaka et al. disclose a process for continuing to run the software. Furthermore, in regards to “one of a process”, to meet the requirements of Claim 18, only one process of the list of alternative processes meets the claim.

21. As for **Claim 19**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), that in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations.

Furthermore Fukasaka et al. also disclose, as stated in column 10 (lines 20 – 37), a situation wherein the image input device (101 – 104) is constantly transferring a moving image to the computer via the expansion board (23), shown in figure 1, for display on the display (30), and at the same time and while continuing to display moving images, another button or switch (from the list identified above) triggers the execution of an application program via the expansion slot (22), also shown in figure 1, which displays simultaneously, on the display (30), with the moving image a dialog between the operator and the application program executed.

Thus, in regards to the “given software” requirement of Claim 19, Claim 1, at least requires a plurality of software programs wherein a corresponding software program is automatically started. However, Claim 19 is broad in that “given software” does not specify solely the software program in Claim 1. For example, “given software”, while applicable to the software program of Claim 1, it is also applicable to an operating system of the computer or to the software required to operate the computer. For the purposes of this rejection, “given” software” is the software required to display the moving image, provided via the expansion board (23), as shown in figure 1, and the “predetermined process” is the dialog simultaneously displayed, provided via the expansion slot (22).

Furthermore, in regards to “one of a process”, to meet the requirements of Claim 19, only one process of the list of alternative processes meets the Claim. Thus, Fukasaka et al. discloses continuing to run the software to displaying the moving image and initiates another application program upon a trigger transmitted from the image input device, via the expansion slot (22), wherein the moving image and the dialog for the application program are displayed simultaneously on the display (30).

Therefore, Fukasaka et al. disclose wherein when the operation mode of said image input device is switched to another operation mode while said image input device is connected to said computer and given software is running (as discussed above), a process (as discussed above) for continuing to run the software (as discussed above), after that, software corresponding to the new operation mode is automatically started.

22. As for **Claim 20**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), that in a case where buttons and switches, such as a power switch, a shutter button which has different

operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations.

In regards to the claim language, the Claim requires wherein the operation mode is switched by a fixed switch or a dial switch on said image input device (101 – 104), or an operation/setup menu in an LCD panel. To meet the requirements of the claim, Fukasaka et al. needs to disclose only one of the above listing, because the above listing includes “or”, thereby implying alternative choices and not mandatory choices. Thus, Fukasaka et al. disclose, at least, a fixed switch (11) on the image input device (101 – 104).

23. For **Claims 22, 24, and 26**, Fukasaka disclose a method of controlling an image input system (figures 1 – 4), a storage medium (hard disk 24, CD-ROM, or other media) that stores a control program for controlling an image input system (figure 1 – 4), and a program product (application program) that comprises a control program for controlling an image input system (figures 1- 4), that are connectable to an image input device (101 – 104) having a plurality of operation modes (see column 10, lines 10 – 19, and lines 50 – 55), and includes a computer (201 – 204) having a plurality of software programs (application programs) each corresponding to each of the plurality of operation modes (“adding a function for initiating an application” program, as stated in column 10, lines 19 and 20), said method/control program comprising: the step/code of the step of automatically starting the software program corresponding to the operation mode of said image input device (101 – 104), when said image input device (101 – 104) is connected to said computer (see explanation below), when a power supply of said image

input device (101 – 104) is turned on after said image input device (101 – 104) is connected to said computer (201 – 204; also see explanation below), or when said image input device is switched to another operation mode while said image input device is connected to said computer (201 – 204; also see explanation below).

First, in Fukasaka et al., a situation is disclosed pertaining to the image input device always connected to the computer. Second, the application program can only be automatically initiated when the image input device is connected to the computer. Again, the application program can only be automatically initiated when the image input device is connected to the computer. Furthermore, the triggering means may be a power switch, as indicated by Fukasaka in column 10 (line 11). Fukasaka et al. clearly disclose a plurality of operation modes and the initiation of a new application program upon the actuating of an operation mode in the image sensing device, as stated in column 10 (lines 10 – 19).

Fukasaka et al. clearly disclose initiating a plurality of application programs corresponding to a plurality of operation modes; albeit, Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.

However, **Official Notice** (MPEP § 2144.03) is taken the both the concepts and advantages of providing a single software program that initiates a plurality of modes corresponding to a plurality of functions are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a single software program that initiates a plurality of modes corresponding to a plurality

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of functions into the image input system of Fukasaka et al. as a means to increase the efficiency of the image input system thereby reducing wasted user waiting times.

24. **Claims 3, 6, 13, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al. in view of Norris.

25. As for **Claims 3 and 13**, the Examiner concluded in regards to Claim 2 and 12, respectively, that the claim language requires a least one of several alternative choices of a list and thus, to meet the requirements of the claim, only one choice within the list needs to be present within Fukasaka et al. Furthermore, the claim language does not define each of the operation modes rather it simply lists the operation modes. However, the operation modes, listed in the claim, are notoriously well known in the art and will be interpreted by the Examiner as such.

Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), that it is possible to add a function for initiating an application program to capture a still image by operating one of these buttons and switches or operating these buttons and switches in different combinations. Thus, Fukasaka et al. only disclose an image-sensing mode wherein various buttons or switches may initiate an application program corresponding to the operation mode.



Fukasaka et al. do not disclose an image playback mode, wherein when in the image playback mode; image browsing software is automatically started on said computer, and loads all images in said image input device.

However, Norris also discloses an image input system. Norris discloses, as shown in figures 1 and 4A and as stated in column 7 (lines 46 – 61), an image input device (12) and a computer system (18) wherein the image input device (12) has an image playback mode and the computer (18) has image browsing software (the album function 76). As stated in column 1 (lines 26 – 52), at the time the invention was made, one with ordinary skill in the art would have been motivated to provide an image input device (12) with an image playback mode and a computer (18) with image browsing software (76), as taught by Norris, in the image input system that automatically initiates a software program/programs corresponding to the operation mode of an image input device, as disclosed by Fukasaka et al., as a means for providing the user with tools to create an electronic photographic album. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to provide an image input device with an image playback mode and a computer with image browsing software, as taught by Norris, in the image input system that automatically initiates a software program/programs corresponding to the operation mode of an image input device, as disclosed by Fukasaka et al.

26. As for **Claims 6 and 16**, the Examiner concluded in regards to Claim 2 and 12, respectively, that the claim language requires a least one of several alternative choices of a list and thus, to meet the requirements of the claim, only one choice within the list needs to be present within Fukasaka et al. Furthermore, the claim language does not define each of the operation modes rather it simply lists the operation modes. However, the operation modes, listed

in the claim, are notoriously well known in the art and will be interpreted by the Examiner as such.

Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), that it is possible to add a function for initiating an application program to capture a still image by operating one of these buttons and switches or operating these buttons and switches in different combinations. Thus, Fukasaka et al. only disclose an image-sensing mode wherein various buttons or switches may initiate an application program corresponding to the operation mode.

Fukasaka et al. do not disclose a slideshow playback mode, wherein when in the slideshow playback mode; slideshow playback software is automatically started on said computer, and automatically loads images in said image input device, and automatically displays the loaded images on a screen.

However, Norris also discloses an image input system. Norris discloses, as shown in figures 1 and 4A and as stated in column 7 (lines 46 – 61), an image input device (12) and a computer system (18) wherein the image input device (12) has a slideshow playback mode and the computer (18) has slideshow playback software (the slideshow function 74) that automatically displays the loaded images on a screen (36). As stated in column 1 (lines 26 – 52), at the time the invention was made, one with ordinary skill in the art would have been motivated to provide an image input device (12) with a slideshow playback mode and a computer (18) with slideshow playback software (74) that automatically displays the loaded images on a screen (36),

as taught by Norris, in the image input system that automatically initiates a software program/programs corresponding to the operation mode of an image input device, as disclosed by Fukasaka et al., as a means for allowing the user to systematically view all the loaded images so as to thoroughly select images for printing and/or permanent storage. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to provide an image input device with a slideshow playback mode and a computer with slideshow playback software that automatically displays the loaded images on a screen, as taught by Norris, in the image input system that automatically initiates a software program/programs corresponding to the operation mode of an image input device, as disclosed by Fukasaka et al.

27. **Claims 5 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al. in view of Driscoll, Jr. et al.

28. As for **Claims 5 and 15**, the Examiner concluded in regards to Claim 2 and 12, respectively, that the claim language requires a least one of several alternative choices of a list and thus, to meet the requirements of the claim, only one choice within the list needs to be present within Fukasaka et al. Furthermore, the claim language does not define each of the operation modes rather it simply lists the operation modes. However, the operation modes, listed in the claim, are notoriously well known in the art and will be interpreted by the Examiner as such.

Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button,

are provided in the image sensing apparatus (101 – 104), that it is possible to add a function for initiating an application program to capture a still image by operating one of these buttons and switches or operating these buttons and switches in different combinations. Thus, Fukasaka et al. only disclose an image-sensing mode wherein various buttons or switches may initiate an application program corresponding to the operation mode.

Fukasaka et al. do not disclose a panoramic image sensing mode, wherein when in the panoramic image sensing mode; panoramic image sensing generation software is automatically started on said computer, automatically loads images, which are sensed in the panoramic image sensing mode and stored in said image input device, and automatically executes synthesis process of the loaded images.

However, Driscoll, Jr. et al. also disclose image input system. Driscoll, Jr. et al. disclose, as shown in figures 11C and 13A and as a stated in column 10 (lines 32 – 47), an image input device (1205) and a computer system (1200) wherein the image input device (1205) has a panoramic image sensing mode and the computer (1200) has panoramic image sensing generation software for synthesizing loaded images. As stated in column 1 (lines 28 – 37), at the time the invention was made, one with ordinary skill in the art would have been motivated to provide an image input device (1205) with a panoramic image sensing mode and a computer (1200) for synthesizing the loaded panoramic images, as taught by Driscoll, Jr. et al., in the image input system that automatically initiates a software program/programs corresponding to the operation mode of an image input device, as disclosed by Fukasaka et al., as a means for providing a user with an increased field of view so as to allow the user to choose the viewing direction of the image. Therefore, at the time the invention was made, it would have been

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obvious to one with ordinary skill in the art to provide an image input device with a panoramic image sensing mode and a computer for synthesizing the loaded panoramic images, as taught by Driscoll, Jr. et al., in the image input system that automatically initiates a software program/programs corresponding to the operation mode of an image input device, as disclosed by Fukasaka et al.

### *Conclusion*

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

30. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

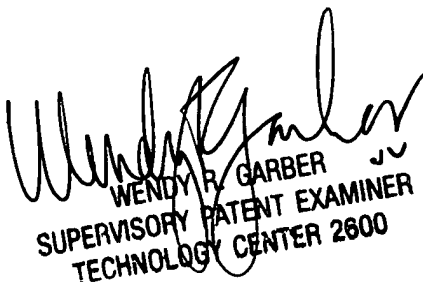
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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM  
January 4, 2005

  
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